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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/945,705	02/23/1997	MICHIYA YAMADA	JP6-131165	3016
7590 03/18/2004				
EXXONMOBIL RESEARCH AND ENGINEERING COMPANY P.O. BOX 900 ANNANDALE, NJ 08801-0900			EXAMINER TOOMER, CEPHIA D	
			ART UNIT	PAPER NUMBER

1714

DATE MAILED: 03/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/945,705

Applicant(s)

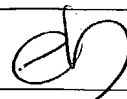
YAMADA ET AL.

Examiner

Cephia D. Toomer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Office action is in response to the amendment filed November 24, 2003 in which claims 1 and 2 were amended.

The rejections of claims 2-5 under 35USC 112, first and second paragraphs are withdrawn in view of applicant's arguments.

The nonstatutory double patenting rejection is withdrawn in view of the amendment to the claims.

The rejection of claims 1 and 3-5 under 35 USC 102(a) is withdrawn in view of applicants' arguments.

The rejection of claims 1 and 3-5 under 35 USC 103(a) is withdrawn in view of the amendment to the claims.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 2(iii), it is not clear what type of alkyl group is represented by the unidentified alkyl group. Clarification is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (US 5,744,430).

Inoue teaches an engine oil composition comprising a base oil, an alkaline earth metal salicylate detergent, zinc dialkyldithiophosphate, a succinimide ashless dispersant, a molybdenum dithiocarbamate and other additives (see abstract).

The base oil contains 15% by wt or less aromatics and may be a hydrocracked oil (see col. 2, lines 26-67; col. 3, lines 1-5 and Table (notes). Inoue is silent with respect to the sulfur content and nitrogen content. However, it would have been obvious to one of ordinary skill in the art to select the claimed base oil because the skilled artisan recognized that hydrocracked oils are prepared by the most severe hydrotreatment process and would possess a sulfur content of 50ppm or less and nitrogen content of 50ppm or less.

The alkaline earth metal salicylate detergents may include a mixture of calcium salicylate and magnesium salicylate. This teaching suggests a 1:1 ratio. The TBN of the salicylate is from 60 to 350. The salicylate is present in the fuel in an amount of 0.5 to 1.2% by wt as converted to sulfated ash (see col. 3, lines 17-21, 54-61).

The zinc dialkyldithiophosphate alkyl groups have from 2 to 18 carbon atoms and may be primary, secondary or tertiary. The dialkyldithiophosphates may be a mixture of compounds wherein each compound's alkyl group is different. The dialkyldithiophosphates are present as (P) in the oil in the amount of 0.04 to 0.1% by weight based on the oil. See col. 4, lines 5-29.

The molybdenum dithiocarbamate alkyl groups contain from 2 to 18 carbon atoms and the compound is present in the oil as Mo in an amount from 0.02 to 0.15% by weight (200-1500ppm). See col. 6, lines 5-22, 56-63.

Inoue fails to teach total amount of alkyl salicylate (cls. 1 and 2) however, no unobviousness is seen in this difference because given the total amount of sulfated ash, the skilled artisan recognizes that the claimed amount of salicylate would be required to obtain this amount of ash.

Inoue also fails to teach the TBN of the composition (claim 5). However, given the TBN of the alkylsalicylate it is recognized that the oil composition would possess the claimed TBN.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue 5,744,526 further in view of Inoue 4,529,526.

Inoue '430 has been disclosed above.

Inoue '430 teaches a succinimide ashless dispersant but fails to teach that the compound is borated.

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Inoue '526 teaches a lubricated oil composition similar to that of '430 containing succinimide dispersant, Inoue '525 teaches that these compounds may be presented in the composition in a borated form (see abstract)


It would have been obvious to one of ordinary skill in the art to have replaced the non-borated succinimide of '430 with the borated succinimide of '526 because Inoue '526 teaches that the compounds are art recognized equivalents.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Cephia D. Toomer
Primary Examiner
Art Unit 1714

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